

53 Powerful Ideas All Teachers Should Know About

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The most useful training of university teachers does not involve ‘training’

There are currently demands to include the proportion of a university’s teachers, who are formally trained (or at least accredited) in public information designed to help students choose where to study. There are already universities in the UK in which this proportion is claimed to be 100% and others where the central plank of the strategic plan is to achieve 100%. In the majority of Universities in most countries the proportion is zero and most higher education teachers, worldwide, do not have any teaching qualification. Some of these teachers are very good indeed without ever having been trained. The debates that surface from time to time about whether higher education teachers really need training are often driven by an assumption about what ‘training’ consists of – seeing it as a process of drilling in specified techniques to specified standards. Wonderful teachers do a bewildering variety of different things, it is argued, so surely training can only provide a straightjacket and does not respect academic autonomy.

This item examines what changes as teachers get better, and therefore what forms of training, if any, might hasten this process.

Studies at Harvard, Washington and elsewhere have identified changes over time in what teachers pay attention to, and there is broad agreement about the stages involved. Postgrad

teaching assistants may be concerned about whether students like them or are impressed by them, and whether they can get away with passing themselves off as an academic in their discipline. It is all about identity and self-confidence rather than about effectiveness. Teachers then progress to a focus of attention on the subject matter itself: ‘Do I know my stuff?’ A new Economics lecturer at Warwick once told me, at the end of his first term of teaching, that he had been spending about 20 hours preparing each lecture but had realised that it was not sensible to try and win the Nobel Prize every week. While some teachers never progress beyond focussing on content, most teachers move on to a focus on methods: ‘How should I go about this?’ There is evidence that training programmes improve student ratings of most aspects of teachers’ practices. Eventually, and with luck, teachers evolve towards a focus of attention on effectiveness: ‘What have students learnt?’ and ‘What is it that I have done that has most impact on what students have learnt?’ It is this focus on the impact of teaching on learning that is most likely to lead to improvements in effectiveness. Training can help establish a habit of evaluation of effectiveness and provide experience of a variety of evaluation tools and methods.

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These developmental models, derived from extensive studies of what actually happens as teachers mature, share the notion that a preoccupation with subject matter is in some sense ‘immature’, and this can cause apoplexy amongst scholars. But as Ernest Boyer argued in *‘Scholarship Reconsidered: Priorities of the Professoriate’*, what seems to matter is that teachers don’t just understand the subject matter, but have ‘pedagogic subject knowledge’. This consists of, firstly, developing ways of explaining the subject matter that students actually understand, and second, becoming aware of the many and varied ways in which students can misunderstand subject matter. I once attended a teaching seminar at Stanford given by a prize-winning teacher who, despite being a famous international research star, taught Chemistry 100 because he felt that a full understanding of basic concepts was essential. He met his army of graduate teaching assistants, each week, to explain to them what students found difficult about that week’s concepts, and to offer examples, diagrams and explanations that he found could overcome these difficulties. Good teachers gradually develop pedagogic subject knowledge, but they do so through a focus on what students have understood and misunderstood, rather than through a focus on the subject itself. Generic training programmes are unlikely to help much here, though discipline-based training or, even better, mentoring by an experienced teacher within the discipline, as in the Stanford example, might. Departments that reject the idea of training ought at least to provide such subject-

based mentoring. Most new teachers develop their courses, and then teach them, as if no-one had ever taught the subject before, and the consequences are inevitably amateur.

In addition to changes over time in their focus of attention, teachers also evolve in terms of their understanding of what teaching consists of. There are many alternative accounts in the literature of this phenomenon, but perhaps the simplest and most useful makes the distinction between a ‘teacher focus’ that involves a conception of teaching as involving primarily presentation of content by the teacher, and a ‘student focus’, in which the purpose of teaching is conceived of as bringing about student learning by whatever means possible. A Professor once said to me “Once the words have left my lips in my lectures, my responsibilities as a teacher are over”. This is an extreme ‘teacher focussed’ conception of teaching. A questionnaire, the Approaches to Teaching Inventory (ATI), successfully identifies teachers’ conception of teaching. Teachers identified by the ATI as ‘teacher focussed’ are more likely to have students who, in response to the teaching, take a surface approach to their studies, attempting only to memorise the content. It is even possible to predict departmental teaching effectiveness by identifying the dominant conception of teaching of the head and the teachers. Many training programmes are oriented to achieving a shift in teachers’ conception of teaching towards a ‘student focus’, and an international comparative study demonstrated that training, regardless of what it actually consists of, succeeds better in

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achieving this shift than does experience of teaching with no training.

As teachers become more experienced this usually involves teaching different courses and different students at different levels. If teachers are paying attention then this results in an increase in teaching repertoire and in flexibility in using different methods in different contexts. Teachers who say things like 'in my teaching I always do X' may not have noticed much about the varied demands associated with the varied contexts in front of them, or noticed that what they always do sometimes does not work well. Training programmes often try and tune teachers into some of the most important variations in context they may encounter, and try and offer alternative teaching methods that might suit different contexts. The widening of teaching repertoire is sometimes disparaged as 'teaching tips', but an increased repertoire requires ideas that go beyond personal experience of unvarying habits. The '53 Interesting Ways to Teach' series of books on lecturing, small group teaching and so on, were designed to do exactly that: offer enough ideas that there was a real likelihood that teachers would increase their repertoire. Making teachers aware of alternative methods also alerts teachers to differences in context the methods might suit. The '53 Interesting Ways to Teach' books started each idea with an outline of a problem that the method was designed to address, which increased awareness of such problems.

What determines whether experience of teaching results in a widening of repertoire

and flexibility is the extent to which teachers are open to their experience, and are reflective about it. Early career teachers are often terrified. The emotional demands of teaching new subject matter to unfamiliar students may result in them hardly noticing what is going on at all. In Carl Rogers' 'Freedom to Learn' he expounded ten fundamental principles of learning. The one that applies here is "*When threat to the self is minimised, experience can be perceived in differentiated fashion and learning can proceed*". Providing some protection, safety and support may be crucial to early progress. New teachers who are thrown in at the deep end with huge teaching loads tend to develop ways of coping rather than ways of being effective. One study of the impact of training included a 'control group' of new teachers who had no support or training at all, and found that they actually got worse over their first year. There are books that contain accounts by award winning teachers of how they teach, and why they teach in the way they do, and they can be inspiring. They are full of reflections, accrued over years, until they coalesce into 'personal theories' about what is going on. These theories then drive subsequent teaching decisions and lead to innovations. Award winning teachers are invariably reflective, but being reflective is not a habit that comes about easily or automatically. Training programmes often attempt to establish habits of reflection, and may also offer conceptual or practical tools that make reflection easier, more insightful and more rewarding.

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One of the striking things about accounts by outstanding teachers of how they teach and why they teach in the way that they do, is that formal educational theory usually plays no part in the development of their insights and practices, and these accounts are often characterised by a complete lack of awareness of the educational literature. However the teachers' rationales often bear a striking resemblance to well established theory and their conclusions to well researched empirical findings. It seems likely that their long journey towards enlightenment might have been a lot shorter if they had bothered to read something. The people who disparage training invariably claim to be scholars – but they are just as invariably unscholarly when it comes to talking or thinking about teaching, and utterly ignorant of educational theory or evidence. Training can quickly introduce teachers to educational ideas so that they can stand on the shoulders of those who have gone before in rapid order instead of making it all up for themselves over decades. A good deal of educational literature is dull, impenetrable or useless – or even all three at the same time. Only a small proportion of educational ideas are 'powerful' in that they embody what I call 'pedagogic leverage' – if you act on them then something different and worthwhile happens.

Much educational theory seems impossible even to act on, let alone likely to produce worthwhile improvements. This collection of '53 Powerful Ideas' hopefully reduces the likelihood of unproductive reading.

It is clearly possible to become a wonderful teacher with no training. However it is also clearly possible to remain terrible for years, or even over an entire career, and also to be miserable whilst teaching. Well conceived training hastens the process of development and makes it less likely that teachers are anxious throughout their careers, and remain 'stuck' with a narrow and naive focus of attention, a crude conception of teaching, a limited ability to respond to varied situations and half-baked rationales. However training that focuses simply on establishing specified practices to specified standards is not likely to achieve any of that. Luckily that kind of training is rare.

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